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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,494	07/02/2003	Kaori Iwamoto	DW0076 US NA	3564
24199	7590	06/15/2004	EXAMINER	
DUPONT DOW ELASTOMERS, LLC			ZACHARIA, RAMSEY E	
PATENT RECORDS CENTER			ART UNIT	
4417 LANCASTER PIKE			PAPER NUMBER	
BARLEY MILL PLAZA 25			1773	
WILMINGTON, DE 19805			DATE MAILED: 06/15/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/612,494

Applicant(s)

IWAMOTO ET AL.

Examiner

Ramsey Zacharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/20/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-5, drawn to an article, classified in class 428, subclass 422.
- II. Claims 6-12, drawn to a process, classified in class 427, subclass 385.5.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process, such as a process involving coating an uncured (as opposed to cured) perfluoroelastomer or one using a solution (as opposed to a dispersion) of a polysiloxane having pendant hydroxyl groups and a blocked isocyanate.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with George E. Kirvan, Jr. on 9 June 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-5. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (WO 99/21710) in view of Onzuka et al. (U.S. Patent 5,844,051).

Tanaka et al. teach a laminate that comprises a perfluororubber. The laminate may be used as a weather strip.

Tanaka et al. do not teach a coating over their laminate that comprises a polysiloxane and a urethane oligomer.

Onzuka et al. teach a coating composition to be applied to elastic bodies such as weather strips (column 1, lines 5-28). The coating comprises a mixture of a polyisocyanate, a compound containing at least two active hydrogen atoms, and a diorganopolysiloxane (column 1, lines 58-67). The reaction of a polyisocyanate and a compound containing at least two active hydrogen

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atoms forms a urethane prepolymer or oligomer. The coating suppresses uncomfortable noise caused by the sliding of glass on the elastic body (column 1, lines 49-57).

One of ordinary skill in the art would be motivated to apply the coating of Onzuka et al. to the weather strip of Tanaka et al. to suppresses uncomfortable noise caused during use of the weather strip.

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (WO 99/21710) in view of Onzuka et al. (U.S. Patent 5,844,051) as applied to claim 1 above, and further in view of Wefringhaus et al. (WO 01/23482).

Tanaka et al. taken in view of Onzuka et al. teach all the limitations of claims 2 and 3, as outlined above, except that Onzuka et al. is silent with respect to the thickness of their coating.

Wefringhaus et al. is directed to a urethane coating applied to elastomers used as sealing components exposed to moving glass parts. The coating may have a thickness of about 10  $\mu\text{m}$ .

One of ordinary skill in the art would be motivated to apply the thickness of Onzuka et al. at a thickness of about 10  $\mu\text{m}$  because Wefringhaus et al. demonstrates that such coatings at such thicknesses are able to reduce noises that occur as the glass moves against the elastomer part.

Regarding claim 3, the courts have held that a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). In this case, it would have been obvious to one skilled in the art to have expected the same properties (e.g. noise reduction) for coating films having thicknesses 7  $\mu\text{m}$  and about 10  $\mu\text{m}$ .

***Allowable Subject Matter***

9. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter.

The invention of claim 4 is directed to a perfluoroelastomer article coated with a durable film comprising a polysiloxane and a urethane oligomer wherein the polysiloxane is a mixture of the two polysiloxanes recited in the claim. The invention of claim 5 is directed to a perfluoroelastomer article coated with a durable film comprising a polysiloxane and a urethane oligomer wherein the urethane oligomer is based on the isocyanate recited in the claim.

Onzuka et al. represent the closest prior art. However, Onzuka et al. do not teach or fairly suggest the use of the mixture of polysiloxanes recited in claim 4 or the specific isocyanate recited in claim 5.

***Conclusion***


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents 6,682,779 and 6,730,385 are cited because they are in the same patent family as WO 01/23482 and WO 99/21710, respectively.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (571) 272-1516. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ramsey Zacharia**  
Primary Examiner  
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